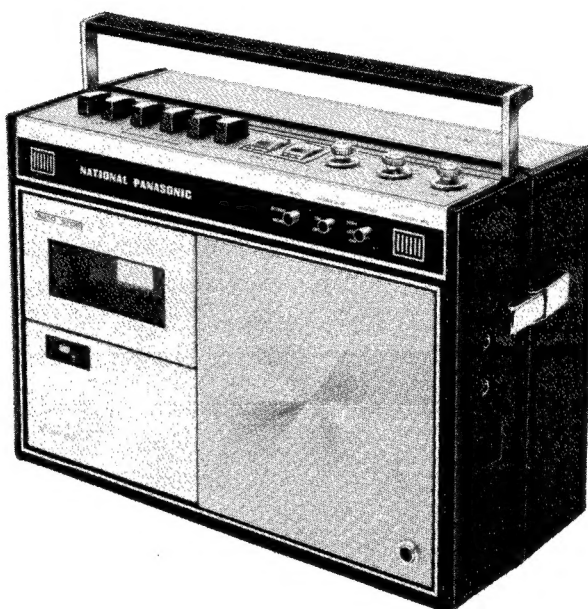


# Service Manual

**NATIONAL**  
TAPE RECORDER  
**PANASONIC**

## PORTABLE STEREO CASSETTE TEPE RECORDER



RQ-224S MECHANISM SERIES

MODEL **RS-264S**

### SPECIFICATIONS

Power Source:	AC: 90~109, 110~125, 200~219, 220~250 volts; 50/60 Hz DC: 9 volts (six "C" type batteries) car/boat battery (using optional car/boat adaptor RP-915)	Tape Speed:	1-7/8 ips.
Power Consumption:	8 W	Fast Forward Time:	Approx. 110 seconds with C-60 cassette
Motor:	Mechanical governor motor	Rewind Time:	Approx. 90 seconds with C-60 cassette
Transistors:	2SA666(2) 2SB175(10) 2SB324(4) 2SB178(1)	Frequency Response:	50~12,000 Hz
Diodes:	OA90(2) FR2(2)	Inputs:	2 "MIC" 2.7 k $\Omega$ -73 dB 2 "AUX IN" 100 k $\Omega$ -20 dB
Maximum Output:	6 W (PMPO)	Outputs:	2 "LINE OUT" 1.8 k $\Omega$ -5 dB 2 "EXT SP" 8 $\Omega$ "HEADPHONE" 8 $\Omega$
Track System:	4 track system, 2 channel stereo	Speakers:	4" dynamic speaker $\times$ 2
Recording System:	AC bias 35 kHz	Recording Time:	One hour (two-way using C-60 tape)
Erasing System:	AC erase	Dimensions:	7-7/8" (H) $\times$ 10-3/4" (W) $\times$ 4-7/8" (D)
		Weight:	8-3/8 lbs.

These specifications are subject to change in order to accommodate improvements in design.



# LOCATION OF PARTS

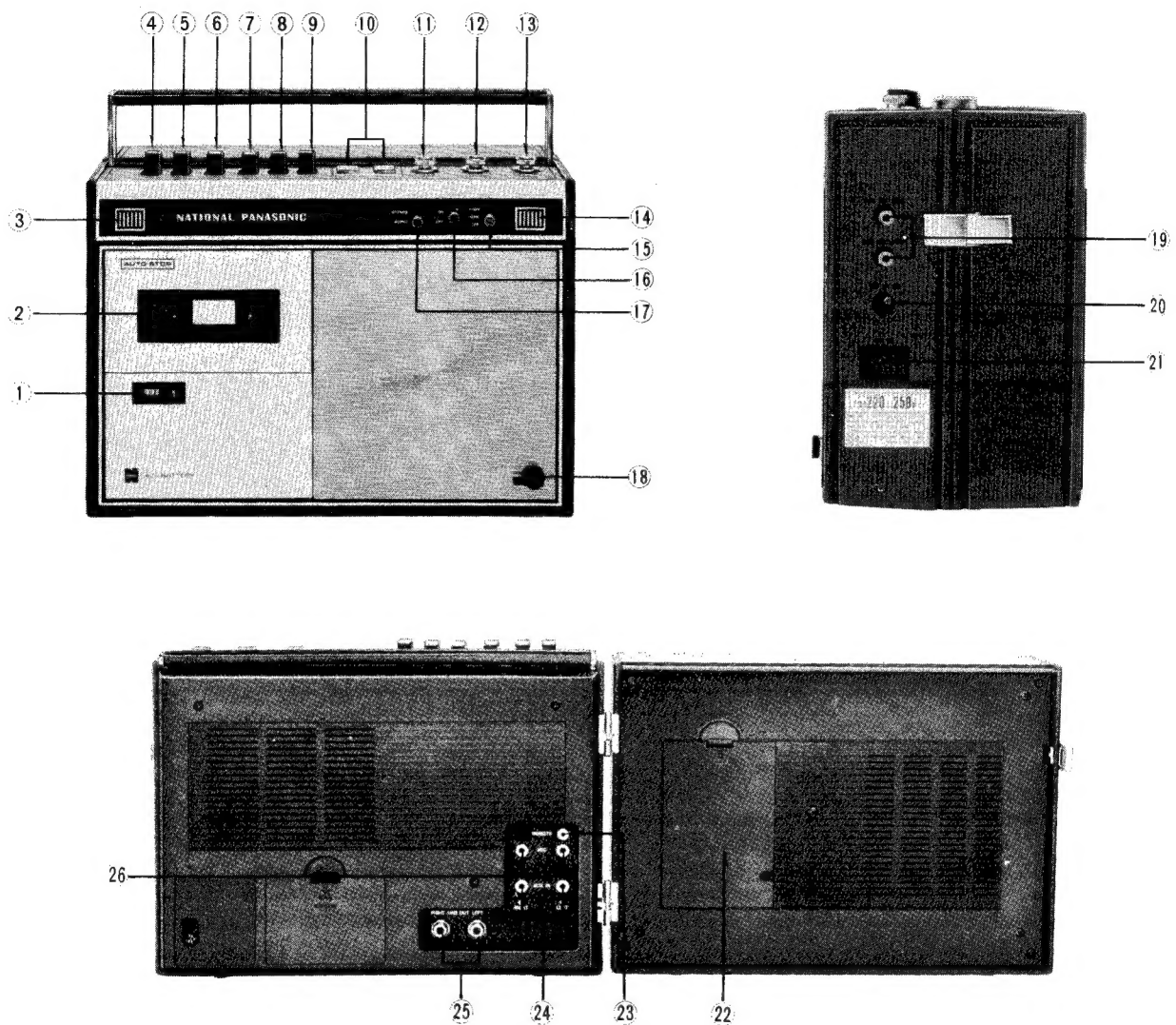


Fig. 1

- |                           |                             |
|---------------------------|-----------------------------|
| ① Tape counter            | ⑭ Built-in microphone (R)   |
| ② Cassette lid            | ⑮ Monitor switch            |
| ③ Built-in microphone (L) | ⑯ Stereo wide switch        |
| ④ Fast forward button     | ⑰ Mode switch               |
| ⑤ Stop button             | ⑱ Headphone jack            |
| ⑥ Playback button         | ⑲ External speaker jacks    |
| ⑦ Rewind button           | ⑳ DC IN                     |
| ⑧ Record button           | ㉑ AC socket                 |
| ⑨ Eject button            | ㉒ Cord storage compartment  |
| ⑩ Level meters            | ㉓ Remote jack               |
| ⑪ Tone control            | ㉔ Auxiliary input jacks     |
| ⑫ Balance control         | ㉕ Line output jacks         |
| ⑬ Volume control          | ㉖ External microphone jacks |

# HOW TO REMOVE THE CHASSIS

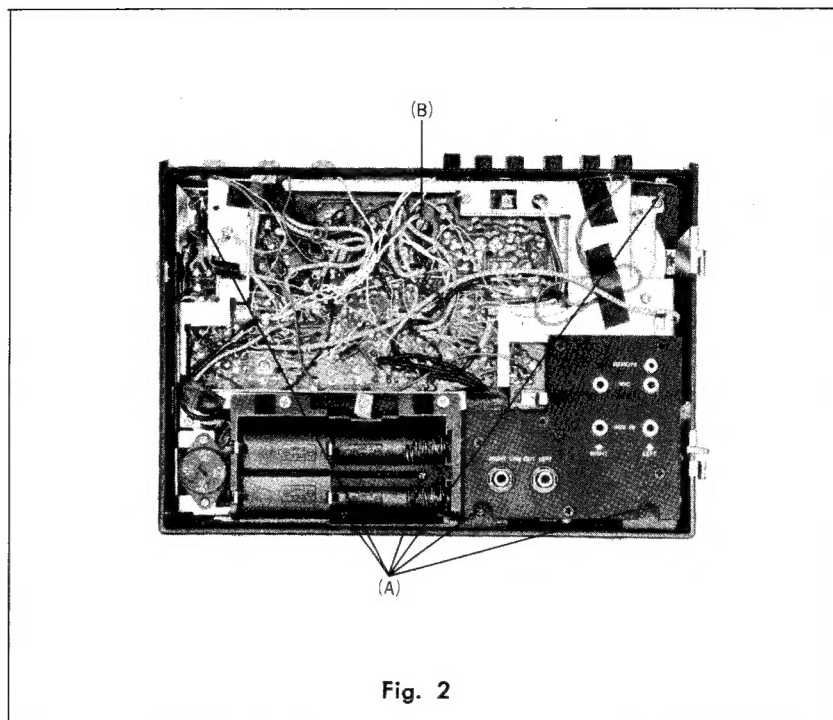


Fig. 2

1. Remove 3 volume knobs.
2. Remove 6 red screws (A) and 1 red pole (B) (shown in fig. 2).
3. Remove headphone jack.
4. Press the eject button to open cassette lid.
5. Set mode switch to STEREO, stereo wide switch to ON and monitor switch to HIGH.
6. Pull out the chassis to lower rear side (shown in fig. 3).

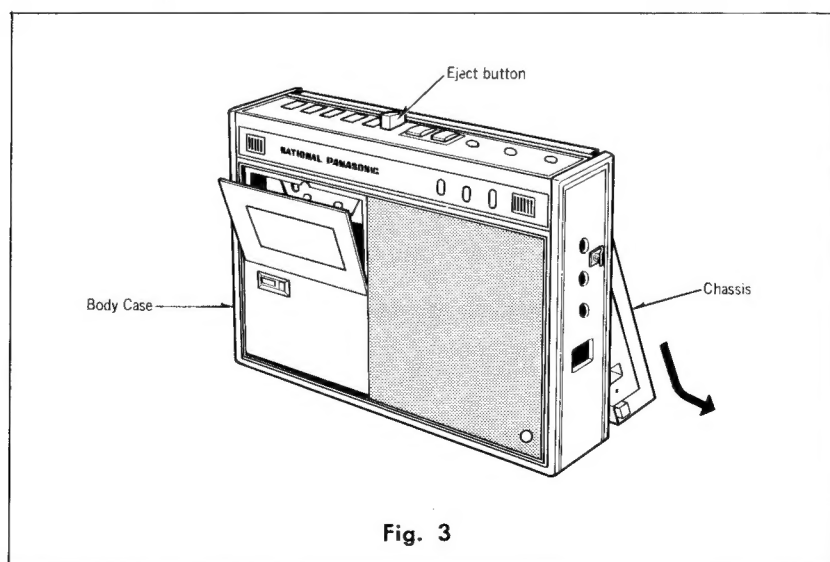


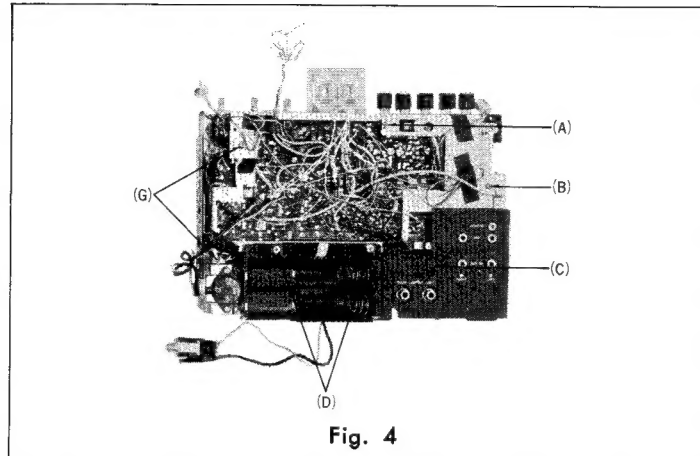
Fig. 3

Remarks: When you assemble the set, please don't forget to set the headphone jack.

# HOW TO DISASSEMBLE CHASSIS

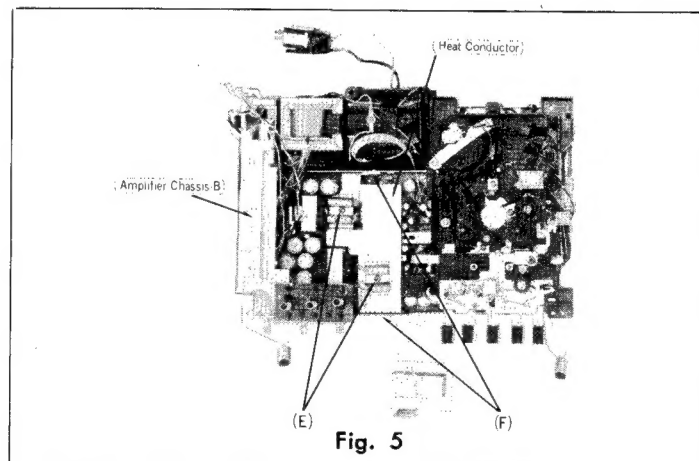
## TO REMOVE MECHANISM

1. Remove screw (A), (B) and (C) (shown in fig. 4).



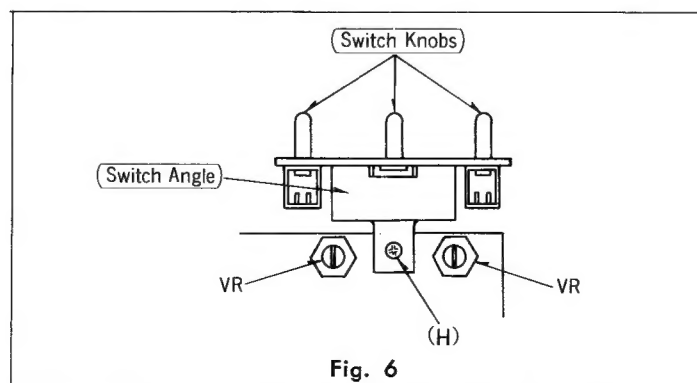
## TO REMOVE HEAT CONDUCTOR

1. Remove 2 battery case holding screws (D) (shown in fig. 4).
2. Remove 2 heat sink holding screws (E) and 2 heat conductor holding screws (F) (shown in fig. 5).



## TO REMOVE AMPLIFIER CHASSIS ASSEMBLY

1. Remove amplifier chassis assembly holding screws (G) (shown in fig. 4).
2. Remove switch angle holding screw (H).



# HOW TO REMOVE CASSETTE LID

1. Remove cassette up springs (Ref. No. G1-11) and cassette lid holding metals (Ref. No. G1-12).

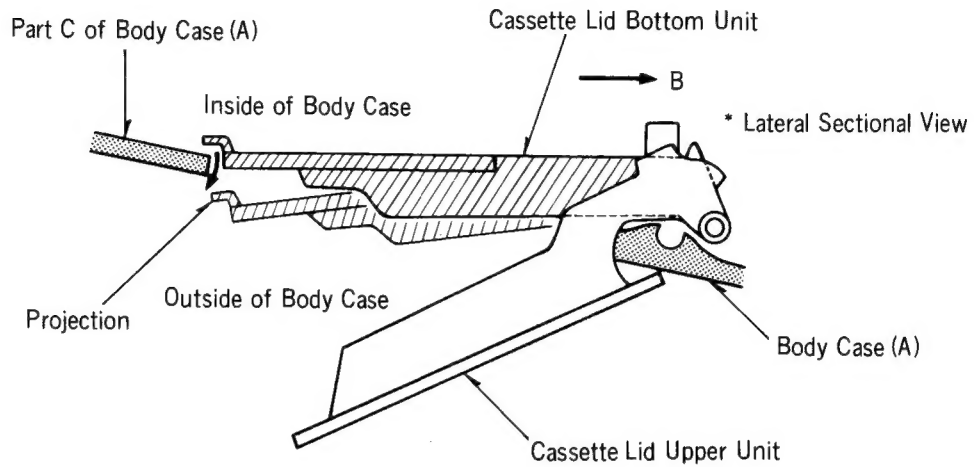


Fig. 7

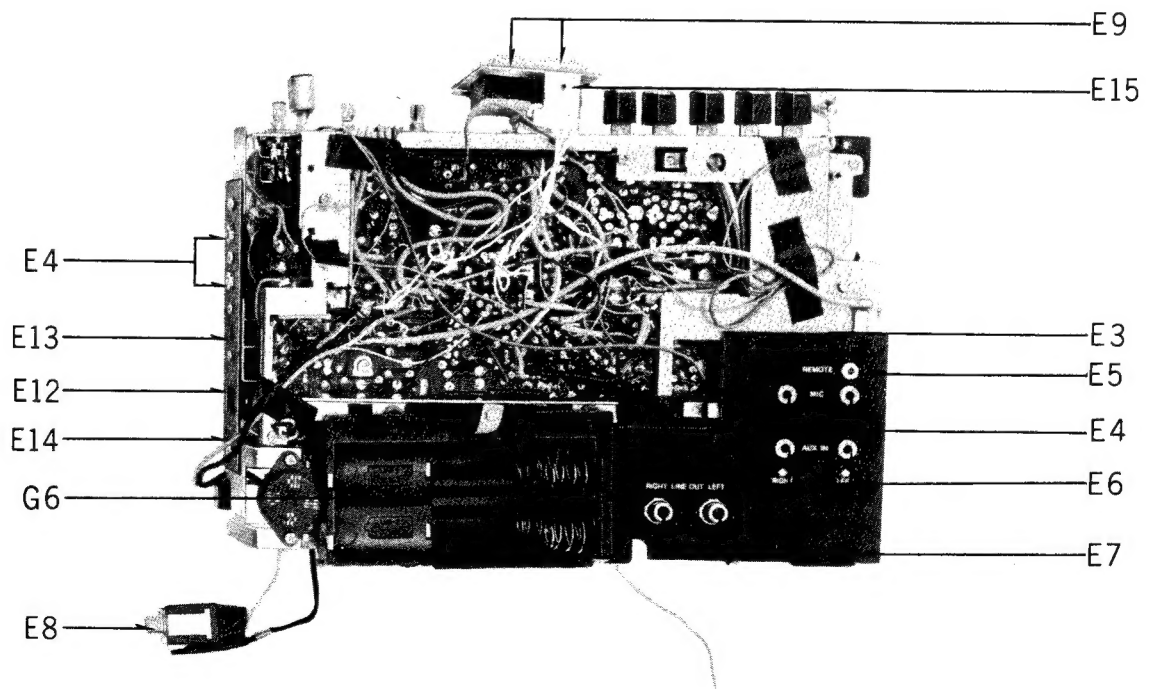
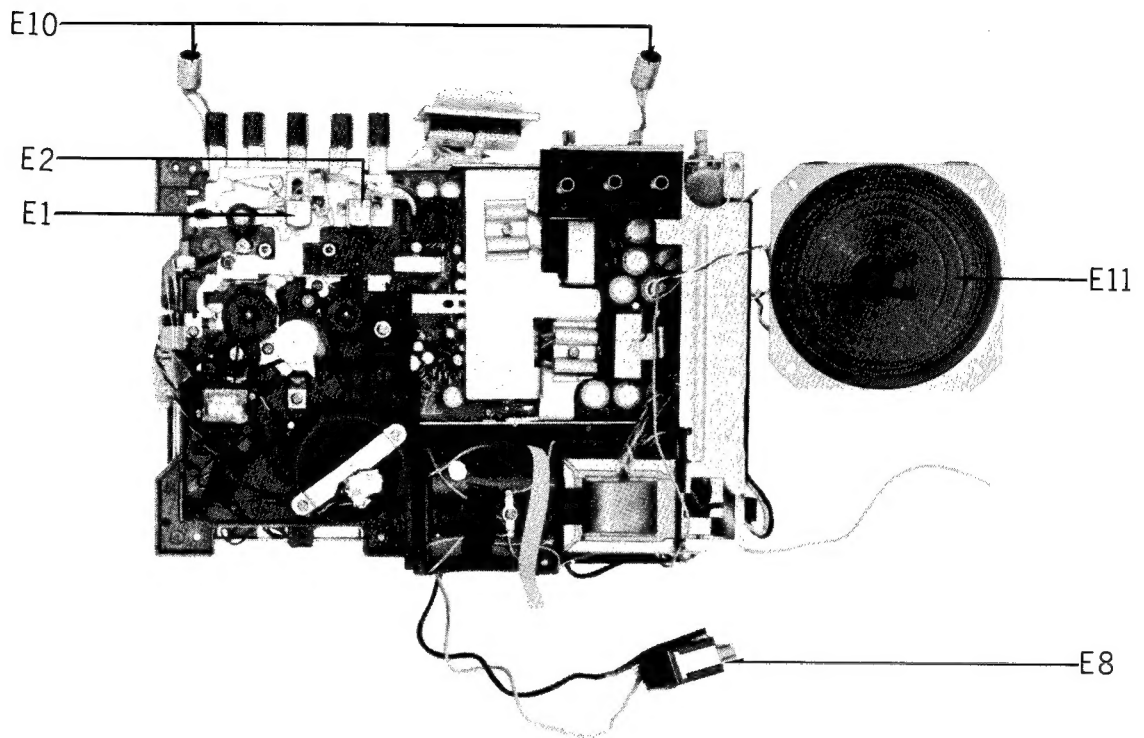
2. Pushing the cassette lid bottom unit in the direction of arrow B, press it out from the inner side of the body case.

**NOTE:** Push it in the direction of arrow B until the projection of the cassette lid bottom unit does not contact part C of the body case.

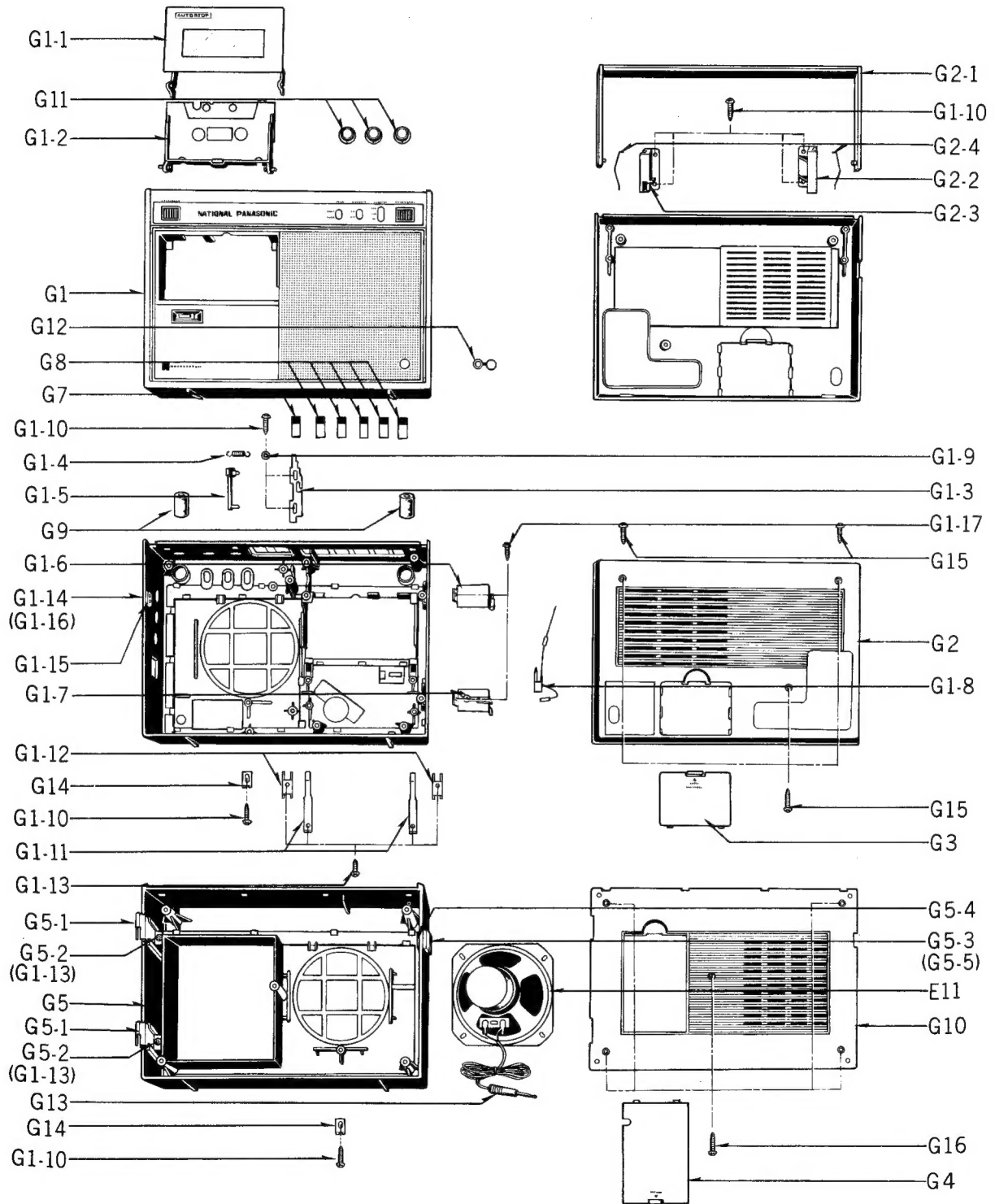
## STANDARD VALUE TO TEST

ITEM	VALUE	PARTS TO BE ADJUSTED	REMARKS
Recording bias current	$0.38 \pm 0.03$ mA	VR7 (CH-1) VR8 (CH-2)	Set the volume control to minimum.
Input level	MIC $-71 \pm 3$ dB AUX IN $-19 \pm 3$ dB	—	To obtain $50 \pm 10 \mu\text{A}$ of recording current through the recording head. Set the volume control to maximum.
Bias oscillation frequency	$35 \pm 5$ kHz	—	—
Erase current	55 mA	—	—
Takeup tension	$65 \pm 15$ gr-cm	—	—
Pressure of pressure roller	$500 \pm 50$ gr	Pressure roller lever spring.	—

# ELECTRICAL PARTS LOCATION

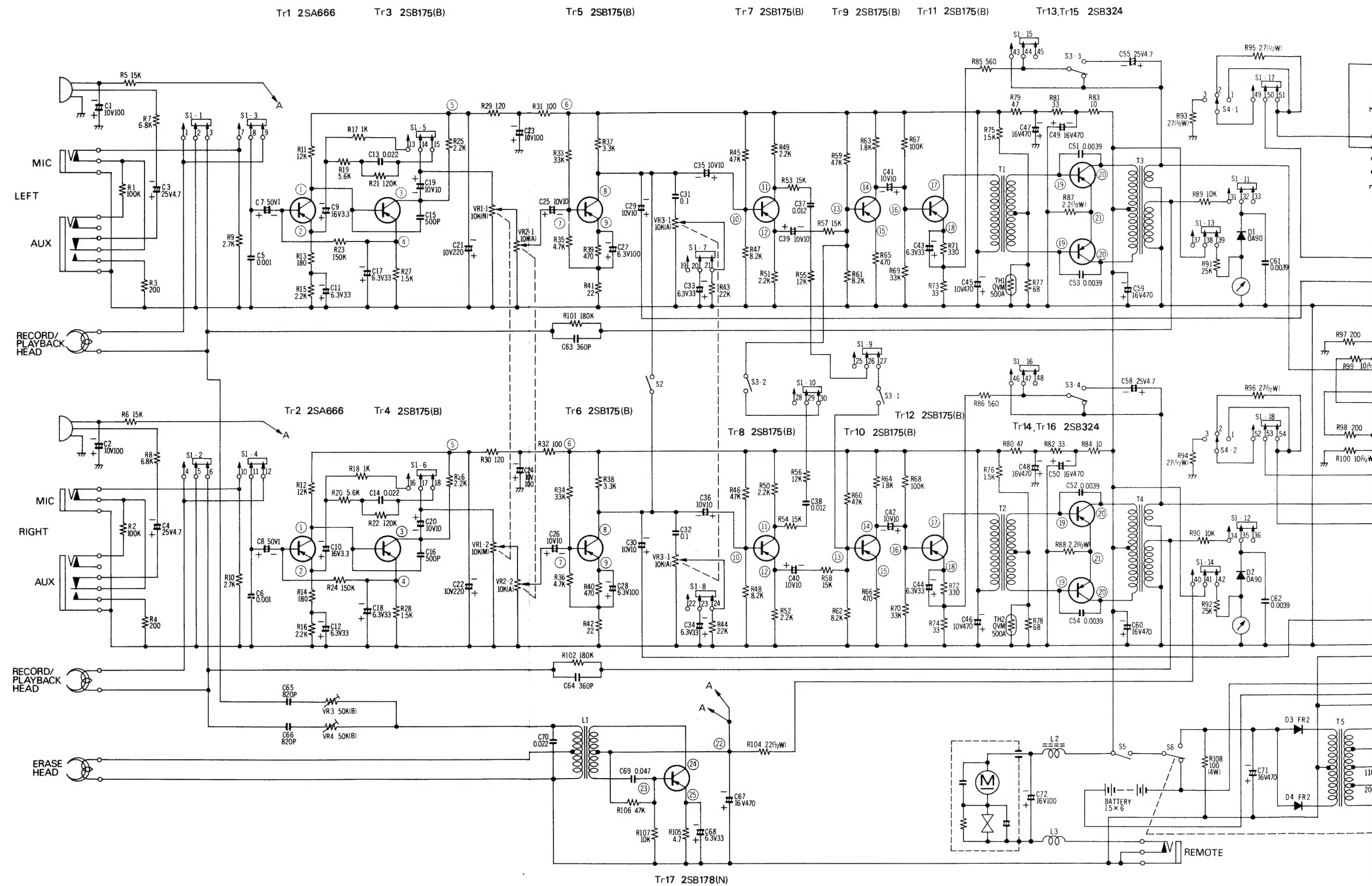


# CABINET PARTS





# SCHEMATIC DIAGRAM MODEL RS-264S



# MODEL RS-264S

2SB175(B)

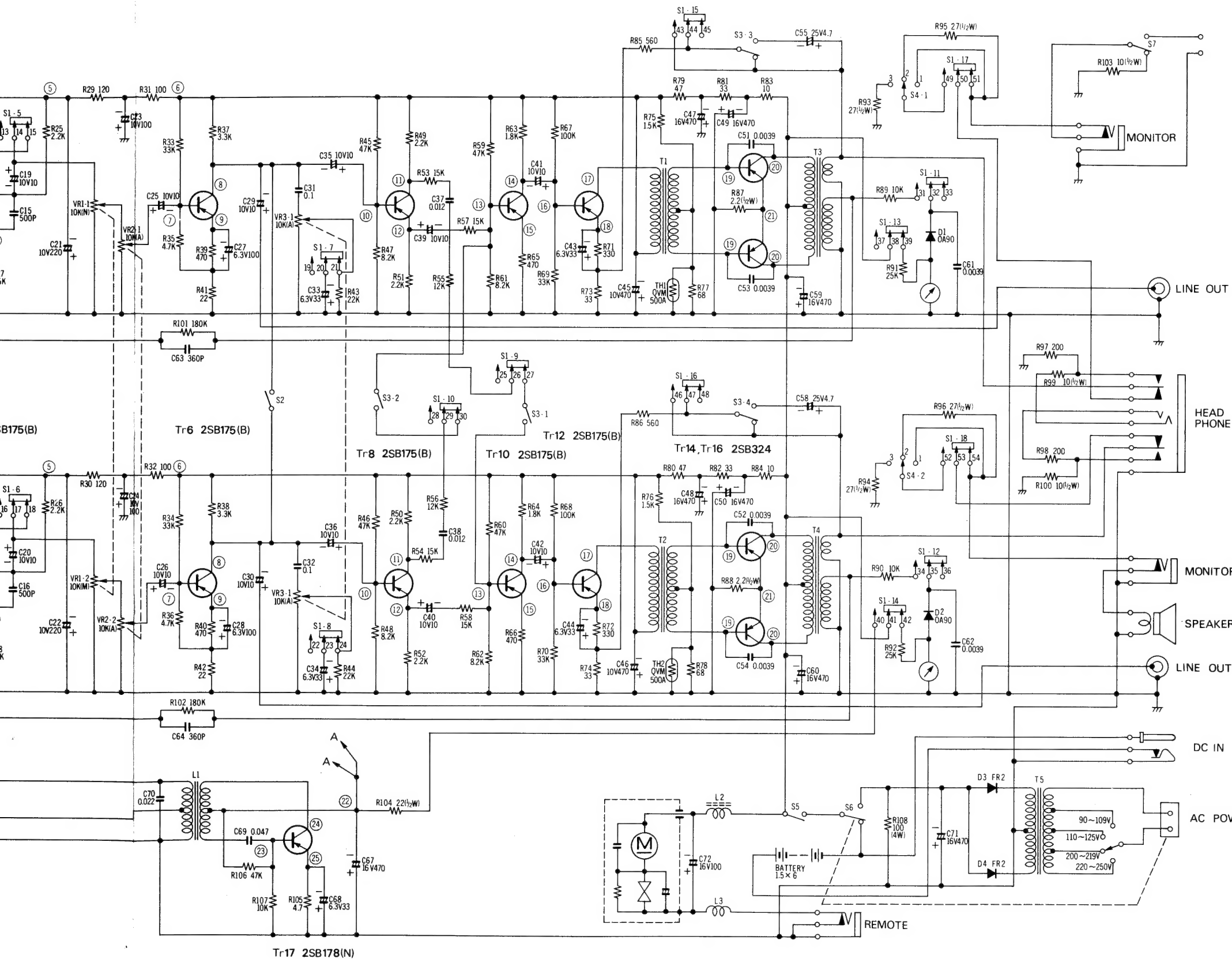
Tr5 2SB175(B)

Tr7 2SB175(B)

Tr9 2SB175(B)

Tr11 2SB175(B)

Tr13,Tr15 2SB324



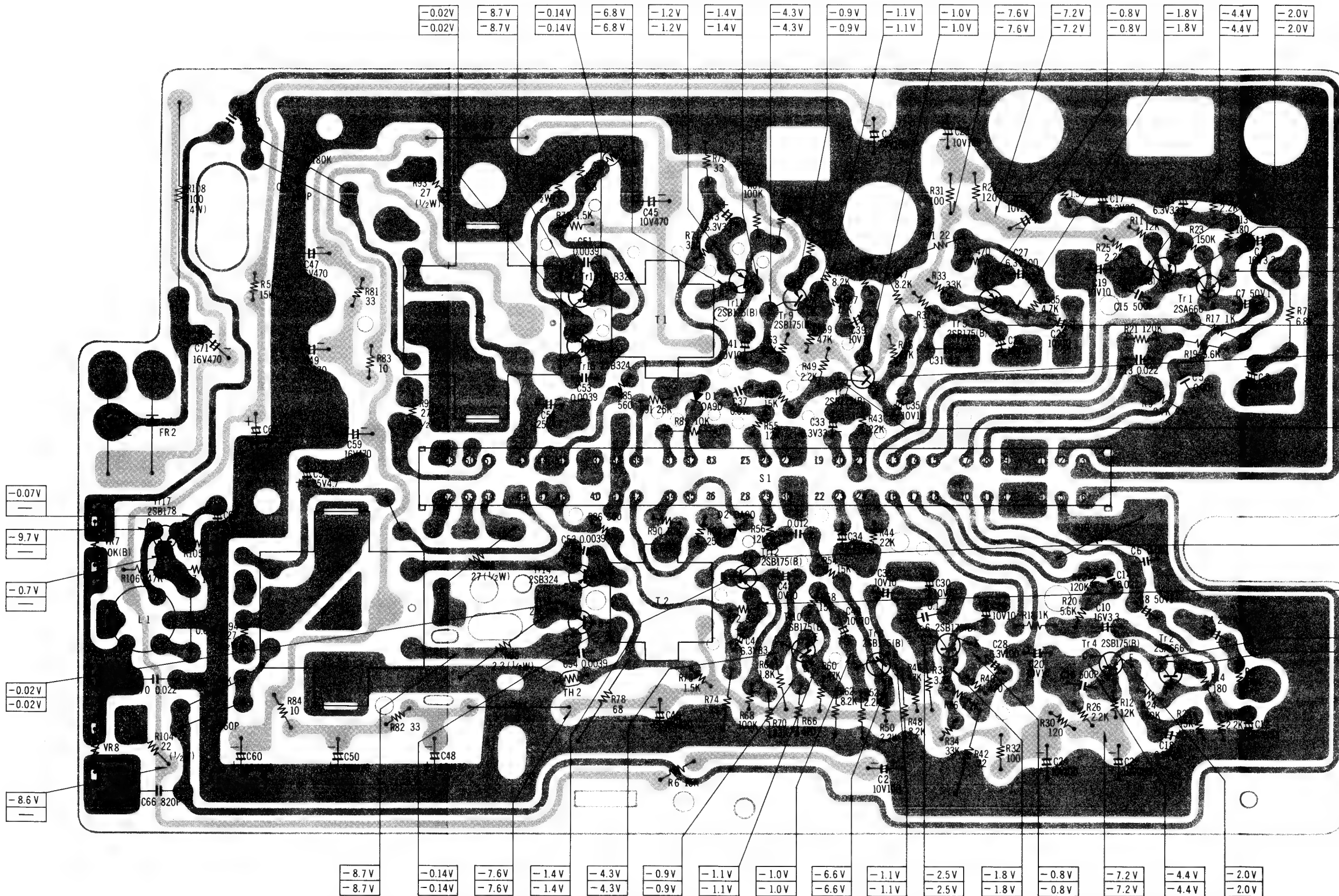
STANDARD VOLTAGE CHART

Check Point	Recording	Playback	Check Point	Recording	Playback
①	-2.2 V	-2.2 V	⑭	-4.3 V	-4.3 V
②	-1.0 V	-1.0 V	⑮	-0.9 V	-0.9 V
③	-4.4 V	-4.4 V	⑯	-1.4 V	-1.4 V
④	-2.0 V	-2.0 V	⑰	-6.8 V	-6.8 V
⑤	-7.2 V	-7.2 V	⑱	-1.2 V	-1.2 V
⑥	-7.6 V	-7.6 V	⑲	-0.14 V	-0.14 V
⑦	-1.8 V	-1.8 V	⑳	-8.7 V	-8.7 V
⑧	-2.5 V	-2.5 V	㉑	-0.02 V	-0.02 V
⑨	-0.8 V	-0.8 V	㉒	-8.6 V	—
⑩	-1.1 V	-1.1 V	㉓	-0.7 V	—
⑪	-6.6 V	-6.6 V	㉔	-9.7 V	—
⑫	-1.0 V	-1.0 V	㉕	-0.07 V	—
⑬	-1.1 V	-1.1 V			

**NOTE:**  
All measurements are under no signal conditions with volume at minimum position.  
Use VTVM for voltage measurements.

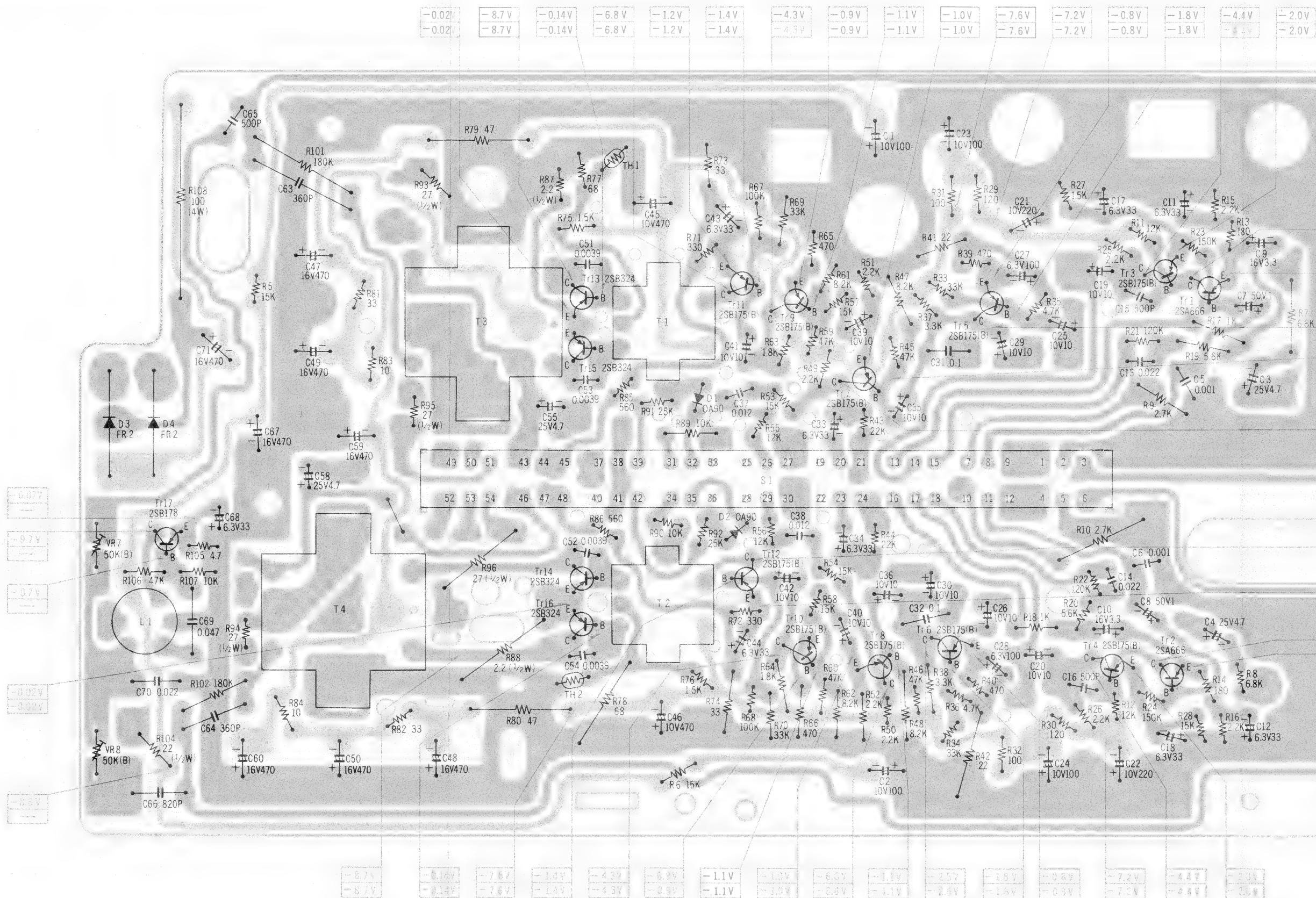
**NOTE:**  
1. S1-1~S1-18 ..... Record/playback select switch (shown in playback position).  
2. S2 ..... Stereo/mono select switch (shown in STEREO position).  
3. S3-1~S3-4 ..... Stereo wide switch (shown in OFF position).  
4. S4-1, S4-2 ..... Sound monitor switch (shown in OFF position).  
1...HIGH, 2...LOW, 3...OFF.  
5. S5 ..... Power switch.  
6. S6 ..... AC/DC select switch (shown in DC position).  
7. S7 ..... AC Voltage select switch.  
8. VR1-1, 1-2 ..... Balance control.  
9. VR2-1, 2-2 ..... Volume control.  
10. VR3-1, 3-2 ..... Tone control.  
11. VR7, 8 ..... Recording bias current adjustment VR.  
12. Resistors are ohms ( $\Omega$ ), 1/4 watt unless specified otherwise.  
K=1,000 $\Omega$ .  
13. Capacitors are microfarad ( $\mu$ F) unless specified otherwise.  
P=Pico-farad.  
14. Encircled numbers (①) show the checkpoints for voltage.  
The values are marked in the standard voltage chart.

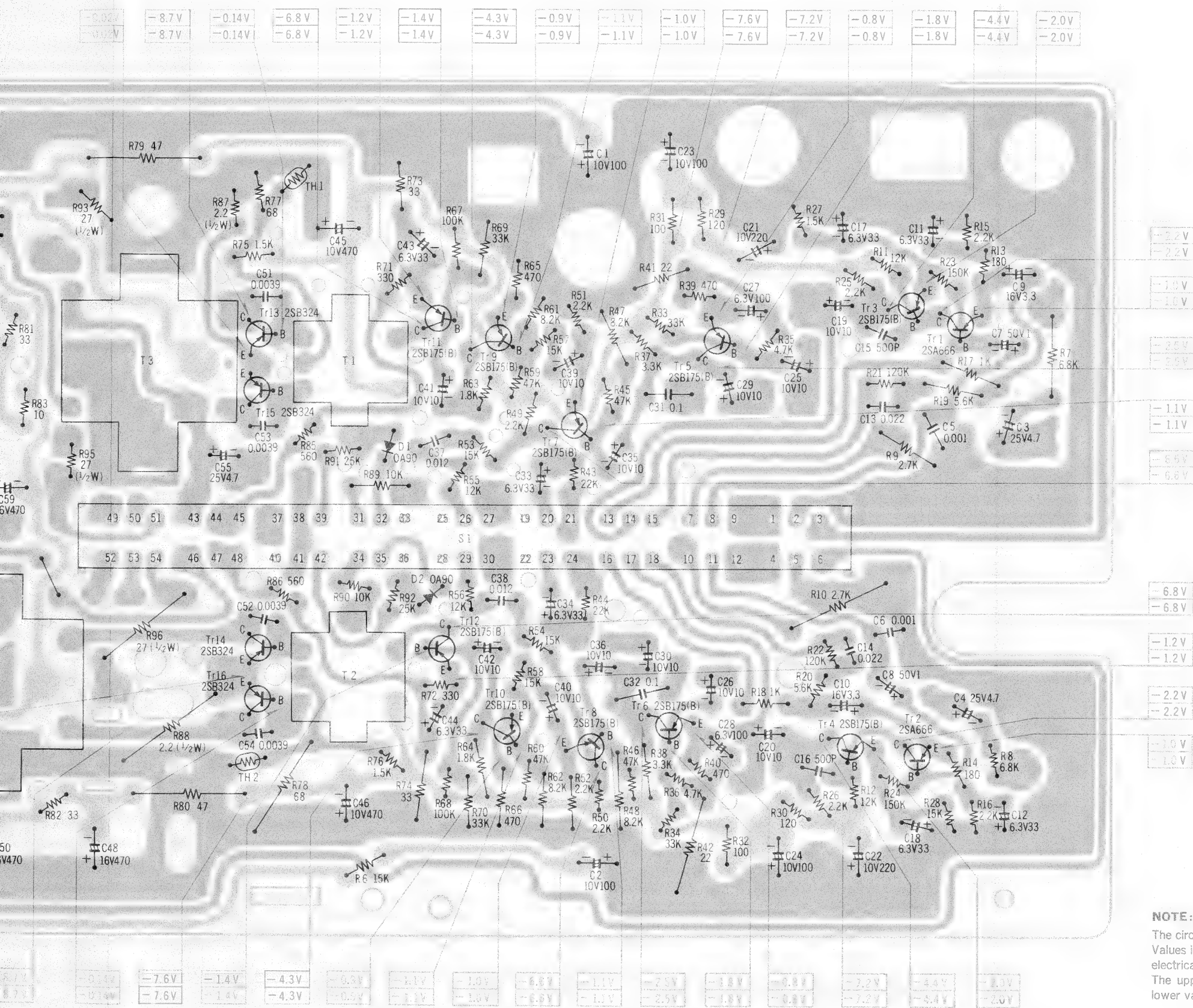
# CIRCUIT BOARD





## CIRCUIT BOARD



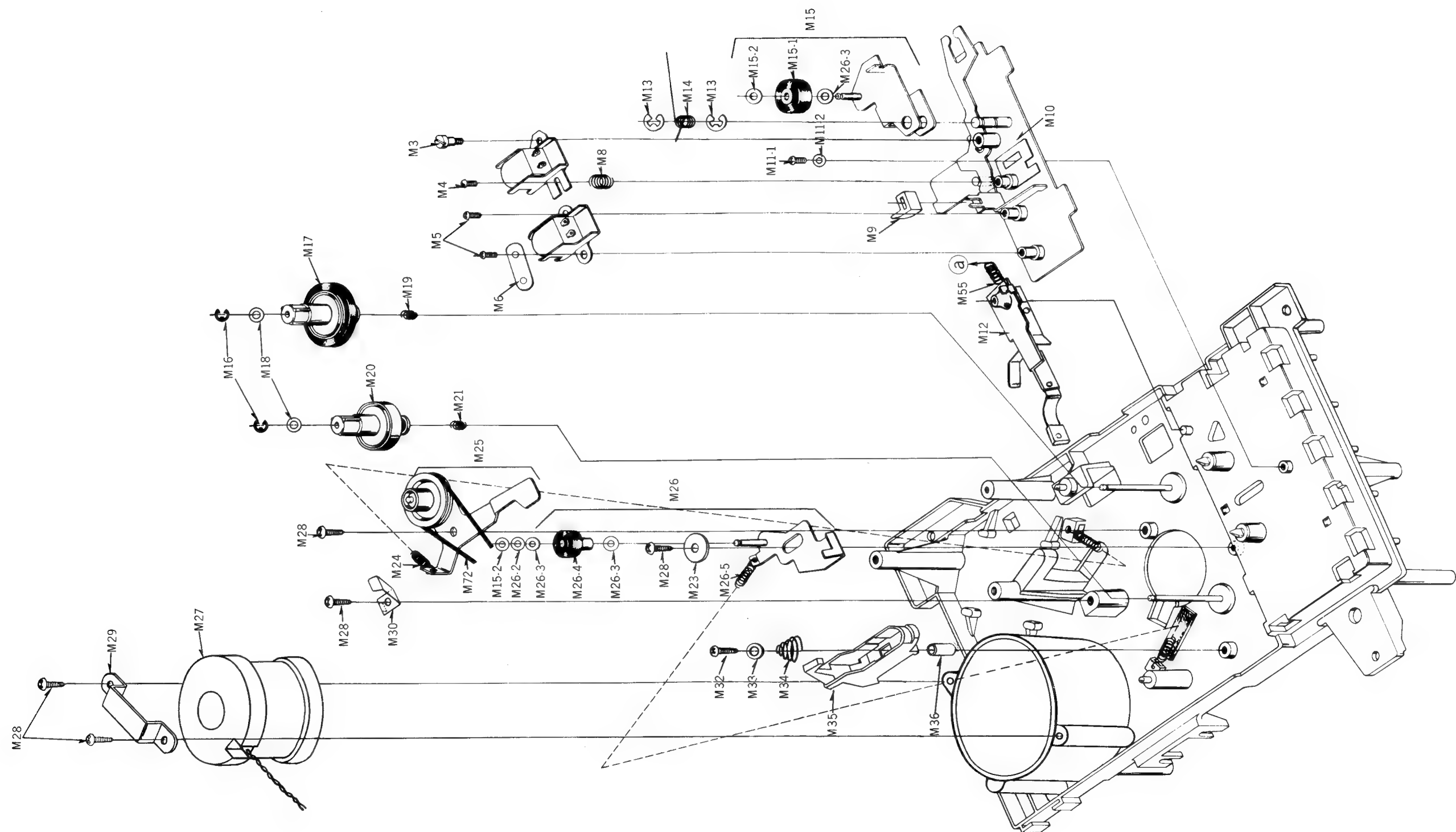


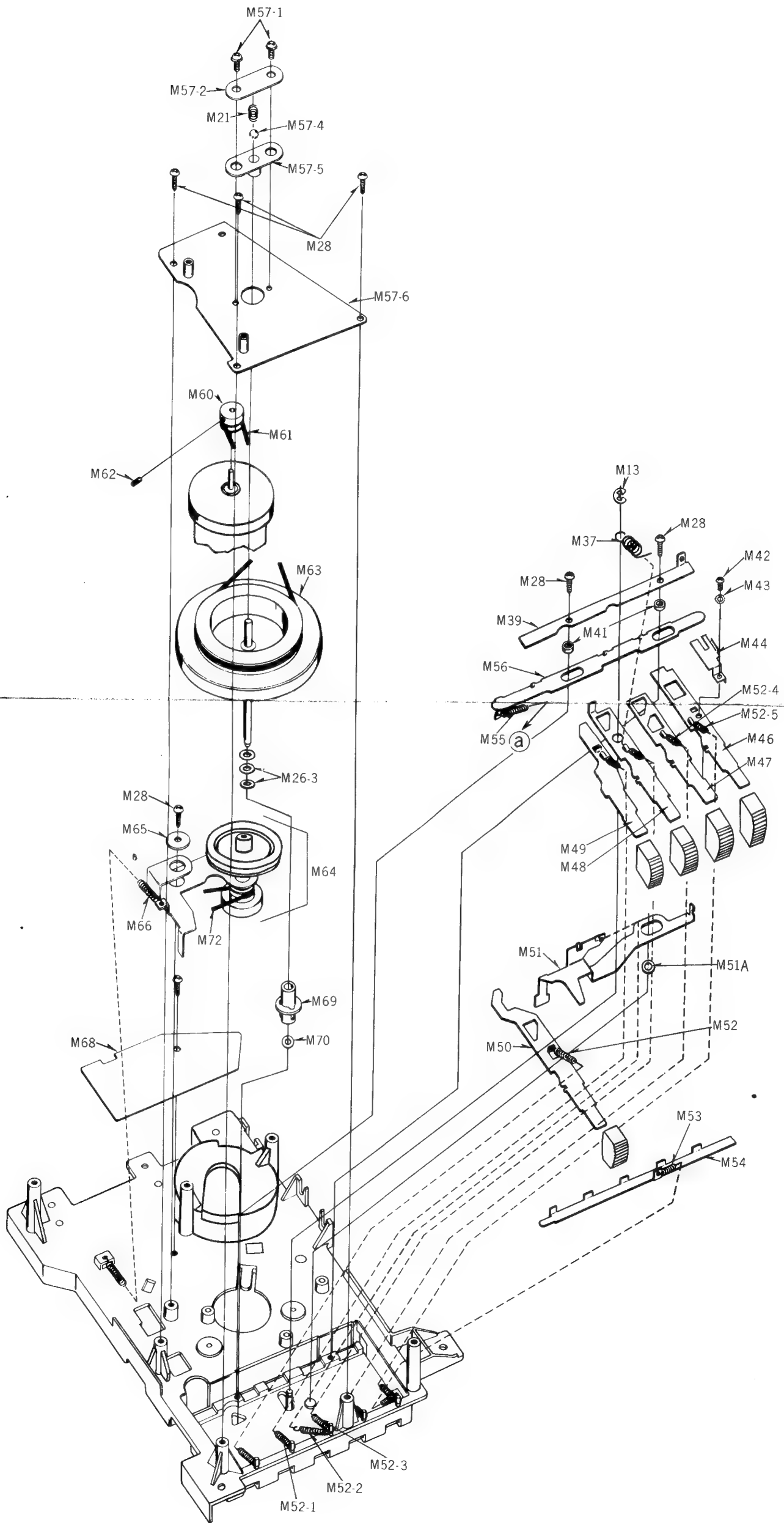




The upper values should be measured during recording and the lower values during playback.

EXPLODED VIEWS



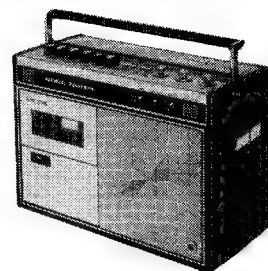




# REPLACEMENT PARTS LIST

MODEL RS-264S

NATIONAL PANASONIC



RS-264S

## NOTE:

1. Be sure to make your orders of Replacement Parts according to this List.
2. "X" in "Rank" Column indicates that the part are not supplyable.
3. "A, B and C" in "Rank" Column indicates the recommended stock of replacement parts. Refer to the recommended stock table on last page.
4. "★" in "Remarks" Column indicates New Parts.
5. "ISO" in "Remarks" Column indicates ISO Screw or Nut.

## NOTA:

1. Habrá que asegurarse que los pedidos de piezas de repuesto se hagan según esta lista.
2. "X" marcado en la columna "Rank", quiere decir que dichas piezas no pueden ser provistas.
3. "A, B y C" marcadas en la columna "Rank" indican el surtido que se recomienda tener de dichas piezas de repuesto.
4. "★" marcado en la columna "Remarks", quiere decir que las piezas son nuevas.
5. "ISO" marcado en la columna "Remarks", quiere decir que es un tornillo o tuerca "ISO".

## NOTE:

1. Bien s'assurer de se conformer à la liste suivante pour les commandes de pièces de rechange.
2. "X", dans la colonne "Rank", indique qu'il n'est pas possible de fournir ces pièces.
3. "A, B et C", dans la colonne "Rank", indiquent le stock recommandé de pièces de rechange. Se reporter en dernière page au tableau des stocks/recommandés.
4. "★", dans la colonne "Remarks", indique les pièces nouvelles.
5. "ISO", dans la colonne "Remarks", indique une vis ou un écrou ISO.

## HINWEIS:

1. Bestellen Sie Ihre Ersatzteile genau nach dieser Liste.
2. Mit "X" in der "Rank" Spalte aufgeführte Teile können nicht geliefert werden.
3. "A, B und C" in der "Rank" Spalte zeigt Ihnen den Vorrat der Ersatzteile an.
4. "★" in der "Remarks" Spalte bedeutet "neue Teile".
5. "ISO" in der "Remarks" Spalte bedeutet ISO-Schraube oder Mutter.

## 按:

1. 關於代用零件之訂購，務請依照此表而行之為荷。
2. 「等級」(Rank) 一欄中之 "X" 標記表示該零件無從供應。
3. 「等級」(Rank) 一欄中之 "A, B, C" 標記表示該零件有存貨，值得介紹。  
請參照最後一頁的「值得介紹存貨表」。
4. 「備考」(Remarks) 一欄中之 "★" 形符號標記表示該零件為新出品。
5. 「備考」(Remarks) 一欄中之 "ISO" 符號標記表示國際標準化機構 (ISO) 式螺絲或螺母。

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
		<b><u>MECHANICAL PARTS</u></b>					
<b>B</b>	M3	Head Holding Screw	QHQT0007	1			RQ-236S, 435S
<b>B</b>	M4	Head Adjust Screw $\odot 2 \times 6$	XSM2-6	1			COMMON
<b>B</b>	M5	Screw $\oplus 2 \times 4$	XSM2+6	2			"
<b>C</b>	M6	Square Lug	QTDT0010	1			RQ-224S, 236S, 434DS, 435DS
<b>B</b>	M8	Head Adjust Spring	QBCT0017	1			RQ-203S, 434DS
<b>A</b>	M9	Plastic Detector	QBJT0057	1			RQ-224S, 230S, 435DS, 434DS
<b>X</b>	M10	Head Slide Plate Assembly	QXHT0002	1			"
<b>C</b>	M11	Screw $\oplus 2 \times 6$	XTM2+6	1			COMMON
<b>C</b>	M11A	Steel Washer $2.2 \times 8 \times 0.5$	QWPT0009	1			★
<b>B</b>	M12	Brake Assembly	QXLT0019	1			RQ-224S, 236S, 435DS, 434DS
<b>C</b>	M13	Stop Ring $E3\phi$	XUC3FT	3			COMMON
<b>B</b>	M14	Pressure Roller Lever Spring	QBNT0003	1			RQ-224S, 236S, 435DS, 434DS
<b>B</b>	M15	Pressure Roller Lever Assembly	QXLT0003	1			"
<b>B</b>	M15-1	Pressure Roller Assembly	QXPT0001	1			"
<b>C</b>	M15-2	Snap Washer $2.6 \times 5.5 \times 0.5$	QWQT0002	2			"
<b>C</b>	M16	Stop Ring $E1.5\phi$	XUC15FT	2			COMMON
<b>A</b>	M17	Take-up Reel Table Assembly	QXPT0021	1			RQ-224S, 236S, 435DS, 434DS
<b>C</b>	M18	Tetoron Washer $2.2 \times 4 \times 0.15$	QBKT7010	2			"
<b>C</b>	M19	Back Tension Spring	QBCT0005	1			"
<b>A</b>	M20	Supply Reel Table Assembly	QXPT0004	1			"
<b>C</b>	M21	Flywheel Spring	QBCT0010	2			RQ-224S, 236S, 435DS, 434DS
<b>C</b>	M23	Steel Washer	QWPT0011	1			RQ-224S, 435DS, 434DS
<b>C</b>	M24	Take-up Lever Spring	QBTT0023	1			RQ-224S, 236S, 435DS, 434DS
<b>B</b>	M25	Take-up Pulley Lever Assembly	QXLT0021	1			RQ-224S, 434DS
<b>B</b>	M26	Rewind Pulley Lever Assembly	QXLT0018	1			RQ-224S, 236S, 435DS, 434DS
<b>B</b>	M26-2	Fiber Washer $3.2 \times 6 \times 0.5$	QBKT7006	1			RQ-224S, 236S, 435DS, 434DS
<b>C</b>	M26-3	Tetoron Washer $3.2 \times 6 \times 0.15$	QWQT0004	5			"
<b>C</b>	M26-4	Rewind Pulley Assembly	QXPT0019	1			"

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
<b>C</b>	M26-5	Rewind Lever Spring	QBNT0004	1			RQ-224S,236S, 435DS,434DS
<b>A</b>	M27	Motor Assembly	QDMT0944	1			★
<b>C</b>	M28	Screw $\oplus 2.6 \times 8$	XTM26+8	10			COMMON
<b>X</b>	M29	Motor Holding Plate	QMFT0019	1			RQ-224S,435S, 435DS
<b>C</b>	M30	Cassette Pressure Spring	QBTT0021	1			RQ-236S
<b>C</b>	M32	Tapping Screw $\oplus 2.6 \times 18$	XTN26+18	1			COMMON
<b>C</b>	M33	Record Prevent Lever Washer	QWPT0008	1			”
<b>C</b>	M34	Record Prevent Lever Pressure Spring	QBCT0016	1			RQ-435S,435DS, 434DS
<b>C</b>	M35	Record Prevent Lever	QMLT0075	1			”
<b>C</b>	M36	Record Prevent Lever Spacer	QMPT0024	1			”
<b>C</b>	M37	Slide Plate Lock Spring	QBCT0013	1			RQ-224S,236S, 434DS,435DS
<b>C</b>	M39	Push Angle	QMAT0013	1			RQ-434DS
<b>C</b>	M41	Lever Spacer	QMST0060	2			★
<b>C</b>	M42	Screw $\oplus 2.6 \times 4$	XSM26+4	1			COMMON
<b>C</b>	M43	Lock Washer 2.6 $\phi$	XWC26BFQ	1			”
<b>C</b>	M44	Record Lock Arm	QMLT0079	1			★
<b>B</b>	M46	Push Lever (Record)	QMLT0051	1			RQ-224S,236S, 434DS,435DS
<b>B</b>	M47	Push Lever (Rewind)	QMLT0052	1			RQ-224S,236S, 434DS,435DS
<b>B</b>	M48	Push Lever (Play)	QMLT0053	1			”
<b>B</b>	M49	Push Lever (Stop)	QMLT0054	1			”
<b>B</b>	M50	Push Lever (F.F)	QMLT0055	1			”
<b>B</b>	M51	Auto Stop Lever	QMLT0065	1			”
<b>C</b>	M51-1	Thrust Washer 5.1 $\times$ 12 $\times$ 0.2	QBKT7011	1			RQ-224S,236S, 435DS,434DS
<b>C</b>	M52	Push Button Spring-A	QBCT0014	1			”
<b>C</b>	M52-1	Push Button Spring (4)	QBTT0032	1			RQ-434DS
<b>C</b>	M52-2	Auto Stop Lever Spring	QBT1072	1			RQ-224S,435DS, 434DS
<b>C</b>	M52-3	Push Button Spring (3)	QBTT0031	1			RQ-434DS
<b>C</b>	M52-4	Push Button Spring-B	QBCT0009	1			RQ-224S,236S, 434DS,435DS
<b>C</b>	M52-5	Push Button Spring (1)	QBTT0032	1			RQ-434S

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
<b>C</b>	M53	Lever Lock Spring	QBTT0025	1			RQ-224S,236S, 434DS,435DS
<b>C</b>	M54	Lock Lever	QMLT0064	1			"
<b>C</b>	M55	Main Switch Spring	QBTT0030	1			RQ-224S,434DS, 435DS
<b>C</b>	M56	Main Switch Lever	QMLT0067	1			RQ-224S, 435DS
<b>C</b>	M57-1	Screw $\oplus$ M3 $\times$ 6	XSM3+6S	2			COMMON 
<b>C</b>	M57-2	Flywheel Retainer	QMQT0005	1			RQ-224S,236S, 434DS,435DS
<b>B</b>	M57-4	Steel Ball 3/32"	QDK1002	1			"
<b>C</b>	M57-5	Flywheel Supporter	QMMT0010	1			"
<b>X</b>	M57-6	Flywheel Retainer Plate Assembly	QXKT0010	1			RQ-224S,236S, 434DS,435DS
<b>B</b>	M60	Motor Pulley	QDPT0031	1			RQ-435S,434DS, 435DS
<b>A</b>	M61	Motor Belt	QDBT0009	1			RQ-224S,236S, 434DS,435DS
<b>B</b>	M62	Motor Pulley Screw	XXA26C4FX	1			"
<b>A</b>	M63	Flywheel Assembly	QXFT0003	1			"
<b>B</b>	M64	FF Lever Assembly	QXLT0016	1			RQ-224S,236S, 434DS,435DS
<b>C</b>	M65	FF Lever Washer	QWPT0004	1			"
<b>C</b>	M66	FF Lever Spring	QBTT0026	1			"
<b>X</b>	M68	Noise Prevent Plate	QTTT0111	1			"
<b>C</b>	M69	Capstan Metal	QMMT0009	1			"
<b>C</b>	M70	Snap Washer 2.4 $\times$ 6 $\times$ 0.5	QWQT0003	1			RQ-224S,236S, 434DS,435DS
<b>A</b>	M72	Take-up Belt	QDBT0008	1			"
<b>C</b>	M73	Tapping Screw $\oplus$ 2 $\times$ 6	XTN2+6	2			COMMON
<b>A</b>	M74	Tape Counter	QDCT0002	1			RQ-434S
<b>A</b>	M75	Counter Belt	QDBT0010	1			"
<b>B</b>	M76	Counter Pulley	QDPT0032	1			RQ-434S
		<b><u>RESISTORS</u></b>					
<b>B</b>	R1, 2	Carbon Resistor 100 K $\Omega$ 1/4 W	ERD14TK104	2			
<b>B</b>	R3, 4	" 200 $\Omega$ 1/4 W	ERD14TK201	2			
<b>B</b>	R5, 6, 53, 54, 57, 58	" 15 K $\Omega$ 1/4 W	ERD14VK153	6			
<b>B</b>	R7	" 6.8 K $\Omega$ 1/4 W	ERD14TK682	1			

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
<b>B</b>	R8	Carbon Resistor 6.8 K $\Omega$ 1/4 W	ERD14VK682	1			
<b>B</b>	R9	Carbon Resistor 2.7 K $\Omega$ 1/4 W	ERD14VK272	1			
<b>B</b>	R10	" 2.7 K $\Omega$ 1/4 W	ERD14TK272	1			
<b>B</b>	R11, 12, 55, 56	" 12 K $\Omega$ 1/4 W	ERD14VK123	4			
<b>B</b>	R13, 14	" 180 $\Omega$ 1/4 W	ERD14VK181	2			
<b>B</b>	R15, 16, 25, 26, 49, 50, 51, 52						
		" 2.2 K $\Omega$ 1/4 W	ERD14VK222	8			
<b>B</b>	R17, 18	Carbon Resistor 1 K $\Omega$ 1/4 W	ERD14VK102	2			
<b>B</b>	R19, 20	" 5.6 K $\Omega$ 1/4 W	ERD14VK562	2			
<b>B</b>	R21, 22	" 120 K $\Omega$ 1/4 W	ERD14VK124	2			
<b>B</b>	R23, 24	" 150 K $\Omega$ 1/4 W	ERD14VK154	2			
<b>B</b>	R27, 28, 75, 76	" 1.5 K $\Omega$ 1/4 W	ERD14VK152	4			
<b>B</b>	R29, 30	Carbon Resistor 120 $\Omega$ 1/4 W	ERD14VK121	2			
<b>B</b>	R31, 32	" 100 $\Omega$ 1/4 W	ERD14VK101	2			
<b>B</b>	R33, 34, 69, 70	" 33 K $\Omega$ 1/4 W	ERD14VK333	4			
<b>B</b>	R35, 36	" 4.7 K $\Omega$ 1/4 W	ERD14VK472	2			
<b>B</b>	R37, 38	" 3.3 K $\Omega$ 1/4 W	ERD14VK332	2			
<b>B</b>	R39, 40, 65, 66	Carbon Resistor 470 $\Omega$ 1/4 W	ERD14VK471	4			
<b>B</b>	R41	" 22 $\Omega$ 1/4 W	ERD14VK220	1			
<b>B</b>	R42	" 22 $\Omega$ 1/4 W	ERD14TK220	1			
<b>B</b>	R43, 44	" 22 K $\Omega$ 1/4 W	ERD14VK223	2			
<b>B</b>	R45, 46, 59, 60, 106	" 4.7 K $\Omega$ 1/4 W	EKD14VK472	5			
<b>B</b>	R47, 48, 61, 62	Carbon Resistor 8.2 K $\Omega$ 1/4 W	ERD14VK822	4			
<b>B</b>	R63, 64	" 1.8 K $\Omega$ 1/4 W	ERD14VK182	2			
<b>B</b>	R67, 68	" 100 K $\Omega$ 1/4 W	ERD14VK104	2			
<b>B</b>	R71, 72	" 330 $\Omega$ 1/4 W	ERD14VK331	2			
<b>B</b>	R73, 74, 81, 82	" 33 $\Omega$ 1/4 W	ERD14VK330	4			
<b>B</b>	R77	Carbon Resistor 68 $\Omega$ 1/4 W	ERD14VK680	1			
<b>B</b>	R78	" 68 $\Omega$ 1/4 W	ERD14TK680	1			


Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
<b>B</b>	R79, 80	Carbon Resistor 47 $\Omega$ 1/4 W	ERD14TK470	2			
<b>B</b>	R83, 84	" 10 $\Omega$ 1/4 W	ERD14VK100	2			
<b>B</b>	R85, 86	" 560 $\Omega$ 1/4 W	ERD14VK561	2			
<b>B</b>	R87, 88	Wire-wound Resistor 2.2 $\Omega$ 1/2 W	ERW12L2R2	2			
<b>B</b>	R89, 90, 107	Carbon Resistor 10 K $\Omega$ 1/4 W	ERD14VK103	3			
<b>B</b>	R91, 92	" 25 K $\Omega$ 1/4 W	ERD14VJ253	3			
<b>B</b>	R93, 94, 95, 96	" 27 $\Omega$ 1/2 W	ERD12TK270	4			
<b>B</b>	R97, 98	" 200 $\Omega$ 1/4 W	ERD14VK201	2			
<b>B</b>	R99, 100	Carbon Resistor 10 $\Omega$ 1/2 W	ERD12TK100	2			
<b>B</b>	R101	" 180 K $\Omega$ 1/4 W	ERD14TK184	1			
<b>B</b>	R102	" 180 K $\Omega$ 1/4 W	ERD14VK184	1			
<b>B</b>	R103	" 10 $\Omega$ 1/2 W	ERD12TK100	1			
<b>B</b>	R104	" 22 $\Omega$ 1/2 W	ERD12TK220	1			
<b>B</b>	R105	Carbon Resistor 4.7 $\Omega$ 1/4 W	ERD14VK4R7	1			
<b>B</b>	R108	Wire-wound Resistor 100 $\Omega$ 4 W	ERM4P101	1			
		<b><u>VARIABLE RESISTORS</u></b>					
<b>A</b>	VR1	Variable Resistor 10 K $\Omega$	EVKC1AL5761	1			★
<b>A</b>	VR2, 3	Variable Resistor 10 K $\Omega$ (A)	EVKC1AL15A14	2			★
<b>A</b>	VR4, 5	Semi-fixed Variable Resistor 50 K $\Omega$ (B)	EVLTOAA00B54	2			COMMON
		<b><u>CAPACITORS</u></b>					
<b>B</b>	C1, 2, 23, 24	Electrolytic Capacitor 10 V 100 $\mu$ F	ECEA10V100	4			
<b>B</b>	C3, 4, 55, 58	" 25 V 4.7 $\mu$ F	ECEA25V4R7	4			
<b>C</b>	C5, 6	Mylar Capacitor 0.001 $\mu$ F	ECQM05102	2			
<b>B</b>	C7, 8	Electrolytic Capacitor 50 V 1 $\mu$ F	ECEA50V1	2			
<b>B</b>	C9, 10	" 16 V 3.3 $\mu$ F	ECEA16V3R3	2			
<b>B</b>	C11, 12, 17, 18, 33, 34, 43, 44, 68						
		Electrolytic Capacitor 6.3 V 33 $\mu$ F	ECEA6.3V33	9			
<b>C</b>	C13, 14, 70	Mylar Capacitor 0.022 $\mu$ F	ECQM05223M	3			
<b>C</b>	C15, 16	Styrol Capacitor 500 pF	ECQS1510M	2			

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
<b>B</b>	C19, 20, 25, 26,	29, 30, 35, 36, 39, 40, 41, 42					
		Electrolytic Capacitor 10 V 10 $\mu$ F	ECEA10V10	12			
<b>B</b>	C21, 22	" 10 V 220 $\mu$ F	ECEA10V220	2			
<b>B</b>	C27, 28	Electrolytic Capacitor 6.3 V 100 $\mu$ F	ECEA6.3V100	2			
<b>C</b>	C31, 32	Mylar Capacitor 0.1 $\mu$ F	ECQM05104M	2			
<b>C</b>	C37, 38	" 0.012 $\mu$ F	ECQM05123M	2			
<b>B</b>	C45, 46	Electrolytic Capacitor 10 V 470 $\mu$ F	ECEA10V470	2			
<b>B</b>	C47,48,49,50, 59,60,61,62	" 16 V 470 $\mu$ F	ECEA16V470	8			
<b>C</b>	C51,52,53,54, 61,62	Mylar Capacitor 0.0039 $\mu$ F	ECQM05392M	6			
<b>C</b>	C63, 64	Styrol Capacitor 360 pF	ECQS1361M	2			
<b>C</b>	C65, 66	" 820 pF	ECQS1821M	2			
<b>C</b>	C69	Mylar Capacitor 0.047 $\mu$ F	ECQM05473M	1			
<b>B</b>	C72	Electrolytic Capacitor 16 V 100 $\mu$ F	ECEA16V100	1			
		<b><u>TRANSISTORS</u></b>					
<b>A</b>	Tr1, 2	Transistor	2SA666	2			RS-262US
<b>A</b>	Tr3,4,5,6,7,8, 9,10,11,12	"	2SB175	10			COMMON
<b>A</b>	Tr13,14,15,16	"	2SB324	4			"
<b>A</b>	Tr17	"	2SB178	1			"
		<b><u>DIODES</u></b>					
<b>A</b>	D1, 2	Diode	OA90	2			COMMON
<b>A</b>	D3, 4	Silicon Diode	FR2	2			RQ-224S, 435DS
		<b><u>THERMISTORS</u></b>					
<b>B</b>	TH1, 2	Thermistor	QVM500A	2			COMMON
		<b><u>TRANSFORMERS</u></b>					
<b>A</b>	T1, 2	Input Transformer	QLAT0101	2			RQ-204S,206S, 236S,435S
<b>A</b>	T3, 4	Output Transformer	QLAT0302	2			RQ-232S,234S, 504S
<b>A</b>	T5	Power Transformer	QLPT0312	1			★

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
		<b><u>COILS</u></b>					
<b>A</b>	L1	Oscillator Coil	QLBT0109	1			★
<b>B</b>	L2	Noise Prevention Coil (C)	QLPT0002	1			RQ-230S, 232S, 435S
<b>B</b>	L3	Noise Prevention Coil (A)	QLP0114	1			RQ-203S, 206S, 223S, 435S
		<b><u>SWITCHES</u></b>					
<b>A</b>	S1	Slide Switch (Record/Playback Selector)	QSST0040	1			★
<b>A</b>	S2	Slide Switch (STEREO/MONO Selector)	QSST0039	1			★
<b>A</b>	S3	Slide Switch (Stereo Wide)	QSST0038	1			★
<b>A</b>	S4	Slide Switch (Sound Monitor)	QSST0037	1			★
<b>A</b>	S5	Leaf Switch (Power)	QSBT0006	1			RQ-434S, 435S
<b>A</b>	S6	AC/DC Selector with AC Socket		(1)			
<b>A</b>	S7	Rotary Switch (AC Voltage)	QSR0004B	1			RQ-237S, 435S RS-267S, 275US
		<b><u>ELECTRICAL PARTS</u></b>					
<b>A</b>	E1	Record/Playback Head	QWY0108Z	1			RQ-229S
<b>A</b>	E2	Erase Head	QWYT2105	1			★
<b>C</b>	E3	Jack Board	QBJT0081	1			★
<b>B</b>	E4	M3 Jack	QJAT0103	4			RQ-209S, 223S, 229S, 435S
<b>B</b>	E5	M2 Jack	QJAT0102	1			”
<b>B</b>	E6	M3 Jack with SW	QJAT0110	2			RQ-434DS, 434S
<b>B</b>	E7	Pin Jack with SW	QJAT0905	2			★
<b>B</b>	E8	Headphone Jack	QJAT0202	1			★
<b>A</b>	E9	VU Meter	QSL3001R	2			★
<b>A</b>	E10	Condenser Microphone	EM24ATD	2			RQ-434S, 434DS
<b>A</b>	E11	Speaker	EAS10P80S	2			RQ-226S
<b>B</b>	E12	AC Socket	QJS0316	1			★
<b>B</b>	E13	DC Jack	QJAT0104	1			★
<b>C</b>	E14	Jack Conceal	QJQT0030	1			★
<b>X</b>	E15	Meter Angle	QTTT0160	1			★



Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
		<b><u>CABINET PARTS</u></b>					
<b>B</b>	G1	Body Case (A) Assembly (Without Speaker)	QYBT0100	1			★
<b>B</b>	G1-1	Cassette Lid Upper Unit	QYAT0044	1			★
<b>B</b>	G1-2	Cassette Lid Bottom Unit	QYAT0046	1			★
<b>C</b>	G1-3	Eject Metal	QKTT0091	1			★
<b>C</b>	G1-4	Eject Spring	QBTT0041	1			RQ-224S
<b>C</b>	G1-5	Eject Angle	QMAT0014	1			★
<b>C</b>	G1-6	Hinge-B	QKCT0002	1			★
<b>C</b>	G1-7	Hinge-C Unit	QYQT0011	1			★
<b>B</b>	G1-8	Spring Switch Unit	QYQT0014	1			★
<b>C</b>	G1-9	Metal Spacer	QMPT0021	2			★
<b>C</b>	G1-10	Tapping Screw $\oplus 3 \times 8$	XTM3+8	8			COMMON
<b>C</b>	G1-11	Cassette-Up Spring	QBPT0038	2			★
<b>C</b>	G1-12	Cassette Lid Holding Metal	QKTT0094	2			★
<b>C</b>	G1-13	Tapping Screw $\oplus 3 \times 6$	XTM3+6	6			COMMON
<b>C</b>	G1-14	Lock Metal	QKLT0001	1			★
<b>C</b>	G1-15	Lock Metal Holder	QKTT0096	1			★
<b>C</b>	G1-16	Screw $\oplus 2.6 \times 6$	XSN26+6FC	2			COMMON
<b>C</b>	G1-17	Tapping Screw $\oplus 3 \times 6$	XTM3+6FX	2			”
<b>B</b>	G2	Bottom Case (A) Assembly	QYCT0067	1			★
<b>B</b>	G2-1	Handle Unit	QYHT0009	1			★
<b>C</b>	G2-2	Handle Fixed Angle-L	QKTT0098	1			★
<b>C</b>	G2-3	Handle Fixed Angle-R	QKTT0090	1			★
<b>C</b>	G2-4	Handle Spring	QBPT0045	2			★
<b>B</b>	G3	Battery Cover Assembly	QYFT0060	1			★
<b>B</b>	G4	Cord Storage Cover Assembly	QYFT0061	1			★
<b>B</b>	G5	Body Case (B) Assembly (Without Speaker)	QYJT1006	1			★
<b>C</b>	G5-1	Hinge-A	QKCT0001	2			★
<b>C</b>	G5-2	Spring-C	QBPT0044	2			★

Rank	Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
<b>C</b>	G5-3	Lock Metal-A	QKLT0002	1			★
<b>C</b>	G5-4	Lock Metal Holder-A	QKTT0095	1			★
<b>C</b>	G5-5	Screw $\oplus 3 \times 6$	XSN3+6	2			COMMON
<b>B</b>	G6	Battery Box Assembly	QYQT0015	1			★
<b>C</b>	G6-1	Battery Terminal	QJBT0031	4			RQ-430S
<b>C</b>	G6-2	Battery Spring	QJBT0010	4			RQ-204S
<b>A</b>	G7	Push Button (A) Assembly	QXBT0003A	1			★
<b>A</b>	G8	Push Button (C) Assembly	QXBT0003B	5			★
<b>C</b>	G9	Microphone Supporter	QBGT0039	2			★
<b>B</b>	G10	Bottom Case (B) Assembly	QYJT1005	1			★
<b>A</b>	G11	Volume Knob Assembly	QYTT0038	3			★
<b>B</b>	G12	Headphone Cap	QBJ1688	1			★
<b>B</b>	G13	Speaker Cord	QFCT0004	1			★
<b>C</b>	G14	Speaker Holding Metal	QKT1154	2			RQ-226S
<b>C</b>	G15	Screw $\oplus 3 \times 8$	XSN3+8FZ	5			COMMON
<b>C</b>	G16	Tapping Screw $\oplus 3 \times 8$	XTS3+8BFZ	5			”
		<b><u>ACCESSORIES</u></b>					
<b>A</b>	A1	Cassette Tape (Demonstration)	QFT1TCCNRJZ	1			RQ-434S,434DS
<b>A</b>	A2	Connection Cord-G	RP8125 (QEB0060P)	1			COMMON
<b>A</b>	A3	AC Cord	QFC1065	1			★
<b>B</b>	A4	Plug Adaptor	QJP0603S	1			COMMON 
<b>B</b>	A5	Instruction Book	QQT1690	1			★
		<b><u>PACKINGS</u></b>					
<b>C</b>	P1	Inside Carton	QPNT0146	1			★
<b>C</b>	P2	Inner Cushion-L	QPNT0141	1			★
<b>C</b>	P3	Inner Cushion-R	QPNT0140	1			★
<b>C</b>	P4	Dust Cover	QFD0071	1			RQ-435S
<b>C</b>	P5	Accessory Box	QPWT0016	1			

### RECOMMENDED STOCK OF REPLACEMENT PARTS

Rank of Part	Estimated Selling Q'ty of Tape Recorder Set					
	Less than	50	100	300	500	1,000 2,000
<b>A</b> rank Parts	2	5	15	20	40	80
<b>B</b> rank Parts	1	2	5	10	20	40
<b>C</b> rank Parts	0	1	3	5	10	20